

**Listing of Claims:**

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
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16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Withdrawn) A method for fitting a wood golf club for a player, comprising the steps of:

providing a first wood golf club for the player, the first wood golf club having a first ~~wood~~ club head with a first club head total weight, ~~and~~ a first vertical center of gravity, and an attachment mechanism for attaching the first club head with a shaft, and a shaft attached to the first club head via the attachment mechanism;

analyzing the performance of the player using the first wood golf club;

providing a second wood golf club for the player, the second wood golf club having a second club head with a second ~~wood~~ club head total weight, ~~and~~ a second vertical center of gravity different from first vertical center of gravity, and

an attachment mechanism for attaching the first club head with a shaft, and the shaft attached to the second club head via the attachment mechanism; and

analyzing the performance of the player using the second wood golf club.

22. (Withdrawn) The method of claim 21, wherein the steps of providing the first wood golf club and providing the second wood golf club include the steps of:

providing the first ~~wood~~ club head having a first-club-head sole weight, and a first-club-head crown weight; and

providing the second ~~wood~~ club head having a second-club-head sole weight, and a second-club-head crown weight, wherein an external shape of the first ~~wood~~ club head and an external shape of the second ~~wood~~ club head are substantially the same, the first-club-head sole weight is greater than the second club-head sole weight, and the first-club-head crown weight is less the second club-head crown weight.

23. (Withdrawn) The method of claim 21, wherein providing a the second wood golf club comprises detaching the shaft form the first golf club head using the attachment mechanism associated with the first golf club head and attaching the shaft to the second golf club head using the attachment mechanism associated with the second golf club head.

24. (Withdrawn) The method of claim 21, further comprising:  
detaching the shaft from the second golf club head; and  
attaching another shaft to the second golf club head based on the  
performance analysis of the player using the second wood golf club.

25. (Withdrawn) The method of claim 24, further comprising:  
analyzing the performance of the player using the second wood golf club  
with the other shaft; and  
determining, based on the analysis, if the combination of the other shaft  
and the second club head is appropriate for the player.

26. (Withdrawn) The method of claim 25, further comprising, when it  
is determined that the combination of the other shaft and the second club head is  
not appropriate for the player:

detaching the other shaft from the second club head using the attachment  
mechanism;

attaching still another shaft to the second club head using the attachment  
mechanism; and

analyzing the performance of the player using the second wood golf club  
with the third shaft.

27. (Withdrawn) The method of claim 27, further comprising  
determining, based on the analysis, if the combination of the third shaft and the  
second club head is appropriate for the player.

28. (Withdrawn) A method for fitting a player with a golf club, comprising:
- attaching a certain shaft with a certain club head to assemble a golf club;
- analyzing the players swing using the assembled golf club;
- determining if the shaft is appropriate for the player based on the analysis;
- and
- when it is determined that the shaft is not appropriate, then detaching the shaft from the club head and attaching a new shaft to the club head.
29. (Withdrawn) The method of claim 28, further comprising analyzing the player's swing using the newly assembled golf club to determine if the new shaft is appropriate for the player.
30. (Withdrawn) The method of claim 28, wherein analyzing the assembled golf club comprises analyzing whether the shaft length is appropriate for the player.
31. (Withdrawn) The method of claim 28, wherein analyzing the assembled golf club comprises analyzing whether the shaft diameter is appropriate for the player.
32. (Withdrawn) The method of claim 28, wherein analyzing the assembled golf club comprises analyzing whether the shaft material is appropriate for the player.

33. (Withdrawn) The method of claim 28, wherein analyzing the assembled golf club comprises analyzing whether the shaft's elastic properties are appropriate for the player.

34. (Withdrawn) The method of claim 28, further comprising:  
determining if the club head is appropriate for the player based on the analysis; and

when it is determined that the club head is not appropriate, then detaching the shaft from the club head and attaching a new club head to the shaft.

35. (Withdrawn) The method of claim 34, further comprising analyzing the player's swing using the newly assembled golf club to determine if the new club head is appropriate for the player.

36. (Withdrawn) The method of claim 34, wherein the new club head comprises substantially the same external shape as the original club head.

37. (Withdrawn) The method of claim 34, wherein the new club head comprises substantially the same total weight as the original club head.

38. (Withdrawn) The method of claim 34, wherein the new club head comprises substantially the same total weight as the original club head.

39. (Withdrawn) The method of claim 34, wherein the new club head comprises a different center of gravity than the first club head.

40. (Withdrawn) The method of claim 34, wherein the new club head comprises a different sole weight than the first club head.

41. (Withdrawn) The method of claim 34, wherein the new club head comprises a different crown weight than the first club head.

42. (Withdrawn) The method of claim 34, wherein the new club head comprises a different loft angle than the first club head.

43. (Withdrawn) A method for constructing a golf club head,  
comprising: determining an overall weight for the club head;  
determining an overall size for the club head;  
determining a center of gravity for the club head  
manufacturing the club head so that the club head comprises the  
determined overall weight and size; and  
varying the thickness of the club head sole in order to achieve the  
determined center of gravity.

44. (Withdrawn) The method of claim 43, wherein determining the center of gravity comprises determining that the club head will have a high center of gravity, and wherein varying the thickness of the club head sole plate comprises making the thickness thinner.

45. (Withdrawn) The method of claim 43, wherein determining the center of gravity comprises determining that the club head will have a low center

of gravity, and wherein varying the thickness of the club head sole plate comprises making the thickness thicker.

46. (Withdrawn) The method of claim 43, wherein determining the center of gravity comprises determining that the club head will have a medium center of gravity, and wherein varying the thickness of the club head sole plate comprises making the thickness a medium thickness.

47. (Withdrawn) The method of claim 43, further comprising varying the thickness of the club head crown in order to achieve the determined center of gravity.

48. (Withdrawn) The method of claim 47, wherein determining the center of gravity comprises determining that the club head will have a high center of gravity, and wherein varying the thickness of the club head crown plate comprises making the thickness thicker.

49. (Withdrawn) The method of claim 47, wherein determining the center of gravity comprises determining that the club head will have a low center of gravity, and wherein varying the thickness of the club head crown plate comprises making the thickness thinner.

50. (Withdrawn) The method of claim 47, wherein determining the center of gravity comprises determining that the club head will have a medium



center of gravity, and wherein varying the thickness of the club head crown plate comprises making the thickness a medium thickness.

51. (Withdrawn) The method of claim 47, wherein varying the thickness of the crown, comprises varying the thickness across the entire crown.

52. (Withdrawn) The method of claim 43, wherein varying the thickness of the sole plate comprises varying the thickness across the entire sole plate.

53. (Withdrawn) A method for constructing a golf club head, comprising: determining an overall weight for the club head;  
determining an overall size for the club head;  
determining a center of gravity for the club head  
manufacturing the club head so that the club head comprises the determined overall weight and size; and  
inserting a sole weight into the club head sole in order to achieve the determined center of gravity.

54. (Withdrawn) The method of claim 53, wherein determining the center of gravity comprises determining that the club head will have a high center of gravity, and wherein inserting a sole weight into the club head sole plate comprises inserting a lighter sole weight into the club head sole plate.

55. (Withdrawn) The method of claim 53, wherein determining the center of gravity comprises determining that the club head will have a low center of gravity, and wherein inserting a sole weight into the club head sole plate comprises inserting a heavier sole weight into the club head sole plate.

56. (Withdrawn) The method of claim 53, wherein determining the center of gravity comprises determining that the club head will have a medium center of gravity, and wherein inserting a sole weight into the club head sole plate comprises inserting a medium weight sole weight into the club head sole plate.

57. (Withdrawn) The method of claim 53, further comprising inserting a crown weight into the club head crown in order to achieve the determined center of gravity.

58. (Withdrawn) The method of claim 57, wherein determining the center of gravity comprises determining that the club head will have a high center of gravity, and wherein inserting a crown weight into the club head crown comprises inserting a heavier crown weight into the club head crown.

59. (Withdrawn) The method of claim 57, wherein determining the center of gravity comprises determining that the club head will have a low center of gravity, and wherein inserting a crown weight into the club head crown comprises inserting a lighter crown weight into the club head crown.

60. (Withdrawn) The method of claim 57, wherein determining the center of gravity comprises determining that the club head will have a medium center of gravity, and wherein inserting a crown weight into the club head crown comprises inserting a medium weight crown weight into the club head crown.

61. (Withdrawn) A club head, comprising:  
a desired center of gravity;  
a crown comprising a variable thickness, the thickness capable of being varied to achieve the desired center of gravity; and  
a sole plate comprising a variable thickness, the thickness capable of being varied to achieve the desired center of gravity.

62. (Withdrawn) The club head of claim 61, wherein the variable crown thickness is capable of being varied across the entire crown.

63. (Withdrawn) The club head of claim 61, wherein the variable crown thickness is capable of being made thin across the entire crown in order to achieve a low desired center of gravity.

64. (Withdrawn) The club head of claim 61, wherein the variable crown thickness is capable of being made thick across the entire crown in order to achieve a high desired center of gravity.

65. (Withdrawn) The club head of claim 61, wherein the variable crown thickness is capable of being made a medium thickness across the entire crown in order to achieve a medium desired center of gravity.

66. (Withdrawn) The club head of claim 61, wherein the variable sole plate thickness is capable of being varied across the entire sole plate.

67. (Withdrawn) The club head of claim 61, wherein the variable sole plate thickness is capable of being made thick across the entire sole plate in order to achieve a low desired center of gravity.

68. (Withdrawn) The club head of claim 61, wherein the variable sole plate thickness is capable of being made thin across the entire sole plate in order to achieve a high desired center of gravity.

69. (Withdrawn) The club head of claim 61, wherein the variable sole plate thickness is capable of being made a medium thickness across the entire sole plate in order to achieve a medium desired center of gravity.

70. (Withdrawn) The club head of claim 61, further comprising a bore sized to receive a hosel fitting affixed to the end of a shaft.

71. (Withdrawn) The club head of claim 70, wherein the bore is oriented so that the shaft will have the proper orientation relative to the club head when the shaft is inserted in the bore.

72. (Withdrawn) The club head of claim 70, further comprising an aperture configured to receive a fastener, the fastener configured to fasten the shaft to the club head.

73. (Withdrawn) The club head of claim 72, wherein the sole plate is recessed around the aperture so that the fastener does not extend beyond the sole plate when it is fastened to the shaft.

74. (Currently Amended) A club head, comprising:  
a ~~desired center~~ plurality of possible centers of gravity;  
a crown comprising a fitting configured to receive an insert, the insert comprising a ~~of a~~ weight configured to achieve a ~~to achieve the desired center of gravity~~ desired one of the possible centers of gravity without effecting the overall weight of the club head; and

a sole plate comprising a fitting configured to receive an insert, the insert comprising a ~~of a~~ weight configured to achieve a ~~to achieve the desired center of gravity~~ desired one of the possible centers of gravity without effecting the overall weight of the club head.

75. (Previously presented) The club head of claim 74, wherein the weight inserted into the crown fitting is lighter in order to achieve a low desired center of gravity.

76. (Previously presented) The club head of claim 74, wherein the weight inserted into the crown fitting is heavier in order to achieve a high desired center of gravity.

77. (Previously presented) The club head of claim 74, wherein the weight inserted into the crown fitting is of a medium weight in order to achieve a medium desired center of gravity.

78. (Previously presented) The club head of claim 74, wherein the weight inserted into the sole plate fitting is heavier in order to achieve a low desired center of gravity.

79. (Previously presented) The club head of claim 74, wherein the weight inserted into the sole plate fitting is lighter in order to achieve a high desired center of gravity.

80. (Previously presented) The club head of claim 74, wherein the weight inserted into the sole plate fitting is of a medium weight in order to achieve a medium desired center of gravity.

81. (Previously presented) The club head of claim 74, further comprising a bore sized to receive a hosel fitting affixed to the end of the shaft.

82. (Previously presented) The club head of claim 74, wherein the bore is oriented so that the shaft will have the proper orientation relative to the club head when the shaft is inserted in the bore.

83. (Previously presented) The club head of claim 74, further comprising an aperture configured to receive a fastener, the fastener configured to fasten the shaft to the club head.

84. (Previously presented) The club head of claim 83, wherein the sole plate is recessed around the aperture so that the fastener does not extend beyond the sole plate when it is fastened to the shaft.

85. (New) A method for configuring a golf club head for a configurable center of gravity, comprising:

configuring the golf club head with fittings configured to receive inserts; and  
inserting inserts in to the fittings that can be altered in order to achieve a desired center of gravity.

86. (New) The method of claim 85, wherein the fittings are threaded and wherein the inserts comprise threads that mate with the threaded fittings.

87. (New) A method of altering the center of gravity of golf club head configured with fittings with inserts inserted in to the fittings, comprising;

determining a first desired center of gravity for the golf club head; and  
altering the inserts in order to achieve the first desired center of gravity.

88. (New) The method of claim 87, further comprising determining a second desired center of gravity for the golf club head and altering the inserts in order to achieve the second desired center of gravity.

89. (New) The method of claim 87, wherein determining the first desired center of gravity comprises monitoring results derived from hitting golf balls with a default center of gravity for the golf club head.

90. (New) The method of claim 87, wherein determining the second desired center of gravity comprises monitoring results derived from hitting golf balls with the first center of gravity for the golf club.

91. (New) the method of claim 88, further comprising continuing to determine a new desired center of gravity for the golf club and altering the inserts to achieve the new desired center of gravity until an optimum center of gravity is achieved.

92. (New) The method of claim 91, wherein an optimum center of gravity is determined based on results obtained from hitting golf balls using a golf club fitted with the with the golf club head.

93. (New) The method of claim 87, further comprising;  
determining a shaft for the golf club head;  
fitting the golf club head with the shaft using a quick disconnect feature.